

Title (en)

STEEL SHEET FOR HIGH-STRENGTH LINE PIPE HAVING EXCELLENT LOW TEMPERATURE TOUGHNESS, AND STEEL TUBE FOR HIGH-STRENGTH LINE PIPE

Title (de)

STAHLBLECH FÜR HOCHFESTES LEITUNGSROHR MIT HERVORRAGENDER TIEFTEMPERATURZÄHIGKEIT UND STAHLROHR FÜR HOCHFESTES LEITUNGSROHR

Title (fr)

TÔLE D'ACIER POUR TUYAU DE CANALISATION À HAUTE RÉSISTANCE AYANT UNE EXCELLENTE TÉNACITÉ À BASSE TEMPÉRATURE ET TUBE EN ACIER POUR TUYAU DE CANALISATION À HAUTE RÉSISTANCE

Publication

EP 3124639 A4 20171115 (EN)

Application

EP 15770365 A 20150325

Priority

- JP 2014070279 A 20140328
- JP 2015059122 W 20150325

Abstract (en)

[origin: EP3124639A1] Provided is a steel plate for a high-strength line pipe with excellent low temperature toughness that can ensure a high critical CTOD value even though separation occurs, and can be easily manufactured at low cost. In the steel plate for a high-strength line pipe, its chemical composition is adjusted appropriately, an average grain size of the steel plate is 10 µm or less in a t/4 position where t is a thickness of the steel plate, and a separation index SI measured on a fracture surface of a Charpy specimen of the steel plate at a specified temperature exceeds 0 mm/mm 2 and is equal to or less than 0.30 mm/mm 2 .

IPC 8 full level

C22C 38/00 (2006.01); **C21D 8/02** (2006.01); **C21D 8/10** (2006.01); **C22C 38/14** (2006.01); **C22C 38/58** (2006.01)

CPC (source: EP KR)

C21D 8/02 (2013.01 - KR); **C21D 8/0263** (2013.01 - EP KR); **C21D 8/10** (2013.01 - KR); **C21D 8/105** (2013.01 - EP KR);
C21D 9/14 (2013.01 - EP KR); **C22C 38/001** (2013.01 - KR); **C22C 38/02** (2013.01 - KR); **C22C 38/04** (2013.01 - KR); **C22C 38/06** (2013.01 - KR);
C22C 38/12 (2013.01 - KR); **C22C 38/14** (2013.01 - EP KR); **C22C 38/58** (2013.01 - EP); **C21D 8/02** (2013.01 - EP); **C21D 8/10** (2013.01 - EP);
C21D 2211/005 (2013.01 - EP)

Citation (search report)

- [E] EP 2980238 A1 20160203 - KOBE STEEL LTD [JP]
- [E] EP 3018231 A1 20160511 - KOBE STEEL LTD [JP]
- See references of WO 2015147055A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

EP 3124639 A1 20170201; EP 3124639 A4 20171115; EP 3124639 B1 20220713; CN 106103778 A 20161109; CN 106103778 B 20190322;
JP 2015190042 A 20151102; JP 6343472 B2 20180613; KR 102041770 B1 20191107; KR 20160118360 A 20161011;
WO 2015147055 A1 20151001

DOCDB simple family (application)

EP 15770365 A 20150325; CN 201580014826 A 20150325; JP 2014070279 A 20140328; JP 2015059122 W 20150325;
KR 20167024857 A 20150325